

**Remarks/Arguments**

Reconsideration of this application is requested. Claims 1 -18 are pending in the application.

**Amendment to Claims**

Claim 8 has been amended to correct an inadvertent typographical error; "he" at the beginning of the claim has been changed to –The--. No new matter has been introduced with the amendment.

**Provisional Obviousness-Type Double Patent**

Claims 1-18 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of copending application no. 10/620654 and unpatentable over claim 20 of copending application no. 10/378996. Applicants have provided a terminal disclaimer with this amendment, in an effort to overcome the rejection, should the copending patent applications issue as patents.

**Rejection of Claims 1-18 Over Hoopengardner (US 4,990,399) In View Of Daniels et al. (US 6,319,978) Under 35 U.S.C. §103(a)**

The Examiner cited Hoopengardner ('399) as showing a carpet cushion comprised of a compressible foam layer coated on one side with a layer of pressure sensitive adhesive. A scrim is placed adjacent the pressure sensitive adhesive such that when the carpet is wound upon itself it can be unwound. As pointed out in the Hoopengardner abstract, the scrim or spacer allows for movement on the carpet on the floor prior to placement and in the rolled form prevents the adhesive from sticking to the adjacent opposite side of the carpet (Hoopengardner abstract and col. 2, lines 36-44). When the carpet is unwound and the carpet placed on the floor the pressure sensitive adhesive adheres the carpet to the floor and prevents slipping and movement of the carpet (col. 2, lines 14-19).

The Examiner cited Daniels et al. ('978) as teaching a water-borne pressure sensitive adhesive suitable for coating a variety of substrates. A vinyl acetate/ethylene polymer is described as having from 25- 65% vinyl acetate and from 45-65 % ethylene. The key disclosure of Daniels et al. is that some of the polymers set forth in Examples 1-8 had low levels of crystallinity (col. 16, line 58 to col. 17, line 5). The Examiner believed it "...reasonable to presume that the claimed range of thermal melting point is inherent to the ethylene employed by Daniels et al." Similarly, the tensile storage modulus of the polymers

of Daniels et al. as well as the heat of fusion would be expected to be identical. Against those teachings it was concluded by the Examiner that it would have been obvious to one skilled in the art to substitute the water borne adhesive having the claimed parameters per the teachings of Daniels et al. for the pressure sensitive adhesive of Hoopengardner.

Response to the Rejection Under 35 U.S.C. §103(a)

Prima Facie Obviousness

At this point of the rejection, Applicants do not question whether it would have been *prima facie* obvious to substitute the water borne pressure sensitive adhesives of Daniels et al. for the pressure sensitive adhesive of the Hoopengardner carpet, as the use of water borne pressure sensitive adhesives are shown at col. 5, lines 12-15. Assuming that the claimed properties of the present polymers were identical to those in Daniels et al. it would have been obvious to use Applicants' claimed polymers imparting spill resistance in the Hoopengardner carpet.

Issues With Respect to Prima Facie Obviousness

The issue with respect to obviousness of the subject matter of Claims 1-18 under 35 U.S.C. §103(a) turns on whether the vinyl acetate/ethylene polymers having the properties set forth in the claims are inherent in the pressure sensitive adhesive vinyl acetate/ethylene based adhesives of Daniels, et al. The arguments presented in this response, coupled with a declaration of Dr. Richard Bott, coinventor of Daniels et al. (US '978), will clearly show that not only are the properties of the polymers claimed are not inherent in Daniels et al., but also, that the properties are significantly different.

It is respectfully suggested that it would have been *prima facie* obvious to employ the Applicants' polymers having the claimed parameters only if they have pressure sensitive properties. Otherwise there would have been no motivation to substitute Applicants' polymers having the claimed properties in the Hoopengardner carpet. It will be shown that Hoopengardner in view of Daniels et al. do not establish a case of *prima facie* obviousness.

Argument

It has been recognized by the Examiner that copending US Application serial no. 10/378,996 (published application US 2004/0175589) and copending US Application serial no. 10/620,654 (published application US 2005/0014013), of which Dr. Rabasco is a named

inventor, are relevant to the present application in light of the provisional rejection on the basis of double patenting. A cursory review of the present application will reveal the polymers herein are identical to those in the cited copending publications in view of the essentially identical description of the polymer properties and the method by which they are prepared. For example, the polymers claimed herein and those in the cited publication have a crystalline melting point ranging from 35 to 110 °C measured at a heat rate of 20 °C per minute; and a tensile storage modulus of at least  $1 \times 10^5$  dynes/cm<sup>2</sup> at a temperature of 115 °C as measured at 6.28 rad/sec. Thus, Applicants intend to use some of the comments made in those applications, along with those in the declaration of Dr. Bott, to rebut the Examiner's presumption that the polymers having the properties claimed herein are inherent in the polymers of Daniels et al.

In copending published application US 2004/0175589 it is reported that the polymers having a crystalline melting point ranging from 35 to 110 °C measured at a heat rate of 20 °C per minute; and a tensile storage modulus of at least  $1 \times 10^5$  dynes/cm<sup>2</sup> at a temperature of 115 °C and measured at 6.28 rad/sec, are non blocking (page 2, [0021]) and this property is shown in the examples on page 19. As the Applicants in US '589 point out at page 4, [0044], blocking is the unwanted adhesion between touching layers of an adhesive coated substrate. Blocking is an inherent feature of a pressure sensitive adhesive and it would be an inherent property of the Daniels et al. ('978) water borne pressure sensitive adhesive polymers. The examples of Daniels et al. also show the polymers being evaluated for loop tack (sticky to the touch) at col. 17, Table 2, a requirement of pressure sensitive adhesives. Even comparative examples 7 and 8 show the presence of loop tack, although less than the claimed Daniels et al. polymers. Thus, even though the polymers of Daniels et al. may have overlapping ranges of vinyl acetate and ethylene, etc., to those of the present application, it is manifest that the polymers are different in terms of their structure and their properties.

In the description of the polymers in copending publication US '589, Example 20 (page 15) provides a comparison of the thermal melting point and heat of fusion for a representative polymer of the type in Daniels et al. ('978). The example shows a very low thermal melting temperature ( $T_m$ ) of -2.5 °C, and a low heat of fusion ( $H_f$ ) of 11.5. In terms of all claims in the present case, the crystalline thermal melt temperature of the Daniels et al. polymers is well below the claimed value of at least 35 °C. In terms of the heat of fusion, the polymers of Daniels et al. are well outside the claimed range set forth in Claims 8 and 15.

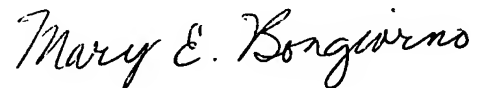
Finally, the declaration of Dr. Bott provides further detail as to the properties of the polymers set forth in the present application and points out their differences in terms of their lack of pressure sensitive adhesion vis-à-vis the Daniels et al. polymers. As he states, the polymers are entirely different in terms of their properties.

Summary

Summarizing the arguments from above it is clear Applicants' claimed range of properties required for the polymers employed in a spill resistant carpet, as set forth in the above-identified application, are not inherent in the pressure sensitive adhesives of Daniels et al. The crystalline melting point for the low levels of crystalline product therein is well below that of the claimed polymers. Further, the polymers having the claimed range of properties are not pressure sensitive and thus, it would not have been *prima facie* obvious to substitute polymers which are not pressure sensitive in the Hoopengardner carpet.

In view of the foregoing amendment and arguments it is requested the claims be allowed and the application passed to issue.

Respectfully submitted,

A handwritten signature in cursive script that reads "Mary E. Bongiorno".

Mary E. Bongiorno  
Agent for Applicants  
Registration No. 36,091

7201 Hamilton Boulevard  
Allentown, PA 18195-1501  
(610) 481-8820